

Title (en)
FOAMING AGENT

Publication
EP 0120550 B1 19890419 (EN)

Application
EP 84300061 A 19840105

Priority
US 46906983 A 19830223

Abstract (en)
[origin: EP0120550A2] This invention relates to an oil drilling foaming agent comprising a mixture of from about 40% to about 60% by weight of a branched chain hexyl poly(oxyalkanediyl) sulfuric acid or sulfuric salt combined with from about 60% to about 40% by weight of a branched chain octyl- and/or branched chain decyl- poly(oxyalkanediyl) sulfuric acid or sulfuric salt, wherein the number average molecular weight of each of the components in the mixture is between about 180 and about 600. The above composition, in the presence of moisture, provides a superiorfoaming agent which is particularly useful in geothermal and air drilling operations. The high stability and foaming power of this composition over a wide range of electrolyte and/or electrolyte-diesel fuel concentrations also recommends its use in foam marker formulations, as a component in wall board manufacture and in other energy related applications. Accordingly, the surfactant mixtures ofthe present invention are those having the basic structure:wherein n in each instance has an average value of 1 to 5, preferably 2 or3; M⁺ is a cation of the group H⁺; Na⁺, K⁺, NH₄⁺or an amino radical containing a lower alkyl group, preferably methyl or ethyl, R is H or methyl, and each of the C₄H₁₃-, C₆H₁₂-and C₁₀H₂₁-alkyl groups have a predominantly branched structure.

IPC 1-7
B01F 17/04; C09K 7/02

IPC 8 full level
C09K 8/38 (2006.01); **C09K 23/00** (2022.01); **C09K 23/04** (2022.01); **F02B 3/06** (2006.01)

CPC (source: EP US)
C09K 8/38 (2013.01 - EP US); **C09K 23/04** (2022.01 - EP US); **F02B 3/06** (2013.01 - EP US); **Y10S 507/928** (2013.01 - EP US)

Cited by
EP0237724A3; US9732270B2; US9758718B2

Designated contracting state (EPC)
DE GB IT

DOCDB simple family (publication)
EP 0120550 A2 19841003; EP 0120550 A3 19861230; EP 0120550 B1 19890419; AU 2184283 A 19840830; AU 558241 B2 19870122; CA 1217321 A 19870203; DE 3477745 D1 19890524; IL 70157 A0 19840229; IL 70157 A 19860930; NO 157662 B 19880118; NO 157662 C 19880427; NO 834402 L 19840824; US 4524002 A 19850618

DOCDB simple family (application)
EP 84300061 A 19840105; AU 2184283 A 19831130; CA 440188 A 19831101; DE 3477745 T 19840105; IL 7015783 A 19831107; NO 834402 A 19831130; US 46906983 A 19830223